

# **DISASTER MEMORY AND “BANISHED MEMORY”. General considerations and case studies from Europe and the United States (19th-21st centuries)**

**Christian Rohr  
University of Bern**

**International Conference**

**“Dealing with Disasters:  
Cultural Representations  
of Catastrophes”**

**Nijmegen/Soeterbeeck  
17-18 June 2021**



# Contents

- Introduction
  - From natural hazards to natural disasters
  - Cultures of risk management and societies of “banished disaster memory”
- Examples from Europe
  - River floods
  - Avalanches
- A comparison with the USA
  - „Rise up and never look back“
  - Hurricane Katrina 2005
- Conclusions

# From natural hazards to natural disasters

“Only human beings can recognize catastrophes, provided they survive them; nature recognizes no catastrophes”

Max Frisch, Man in the Holocene (1979/1980)

# From natural hazards to natural disasters

- Specific factors responsible for disaster perception in past and present societies
- Parameters to perceive a natural hazard as disaster
  - The helplessness of the people trying to cope with the damage with the available means
  - The inability of individuals to explain and understand the event
  - The material and personal suffering
  - A series of natural hazards within a short period of time, which can raise the vulnerability of the afflicted people
  - The symbolic connotations and patterns of interpretation, such as connections to natural disasters described in the Bible
  - The general predicament, such as a simultaneous economic, religious and climatic crisis
  - The unexpectedness of the event, which depends on how prepared a society is for one-time or recurrent threats

# Unexpectedness

- Natural hazards occurring unexpectedly rather experienced as disaster than those people can prepare for
  - Earthquakes (including tsunamis), storm surges, but also sudden local thunderstorms
  - People do not have time to undertake actions of short-time prevention
  - Relatively high number of victims
  - Sometimes related to carelessness in choosing settling places, building material, etc.
- Vulnerability of the society significantly higher

## Expectedness

- Frequently recurring hazards perceived as disasters only if they are extremely destructive
  - Hot spots of frequently recurring natural hazards in southeast Asia (Philippines, Indonesia)
  - Cultures of earthquake management in Japan und southern Italy
  - Cultures of risk management (floods, avalanches) in pre-modern Alpine areas
- Signs for the upcoming event are well known in the societies affected
  - Strategies of prevention undertaken also in times without major hazards
- Resilience of a society is relatively high

# From cultures of risk awareness to societies of “banished disaster memory”

- Cultures of risk management (“Risikogesellschaften”)
  - Term “Risikogesellschaft” introduced by German sociologist Ulrich Beck (1986)
  - Distinction between risk (“Risiko”) vs danger/threat (“Gefahr”) by Niklas Luhmann (*Risk: A Sociological Theory*, 1991)
  - “Cultures of disaster” in the Philippines (Greg Bankoff, 2003)
  - Adaptation of daily life (socioeconomic setting, mentalities) to a frequently recurring threat
- Societies of “banished disaster memory”
  - Arno Borst: *Das Erdbeben von 1348. Ein historischer Beitrag zu Katastrophenforschung*. In: Historische Zeitschrift 233, 1981, 529-569.
  - “Erdbeben als dauernde Erfahrung der Gesellschaft und der Geschichte anzunehmen, widerstrebt dem modernen europäischen Selbstgefühl zutiefst. Es isoliert Katastrophen in der Gegenwart und eliminiert sie aus der Vergangenheit, weil sie die Zukunft nicht definieren sollen.” (S. 532)

# Floods

## Adaptation strategies and memory cultures

- Life close to water ways between benefit and risk
  - Risk of flooding integrated into daily socioeconomic life (e.g. continuous acquisition of timber to maintain bridges and constructions for flood prevention)
- Structural adaptation strategies
  - Settlements erected in the more secure inner side of river loops
  - Historical city centres mostly on elevated places
  - Crafts dependent from water power and water supply necessarily exposed to flood risk
  - Adaptation of buildings (position of windows, storage rooms etc.) to the worst case
- Flood marks as signs of a vivid memory culture
  - Affixed to public buildings and/or other well visible places
  - Useful only to some extent for hydrological reconstruction
  - Memory by flood marks partly vanishing during the last decades



## Flood mark of 1501

Mittich am Inn, Lower Bavaria

[was] das nit an grose  
slag an vnser frauen tag  
als in himel baid enpfanen  
ist die güss daher gangen  
als man zalt 1501 jar  
mügt ir glauben für bar

(Wasn't this a big blow on the  
day of the Ascension of Mary?  
The water reached this mark in  
the year of 1501. You may  
believe that.)



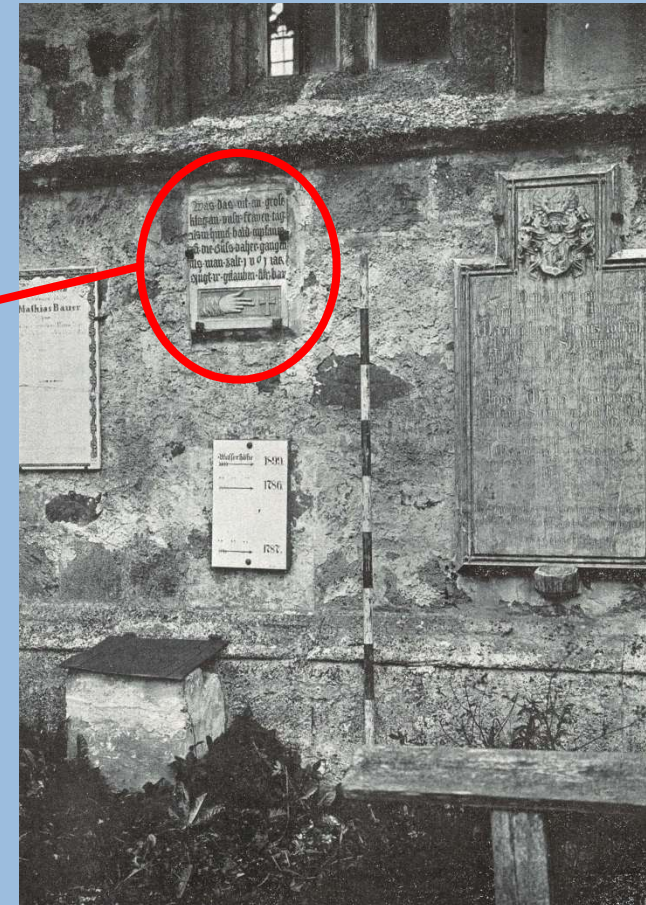
Photograph: Christian Rohr

## Flood mark of 1501

Mittich am Inn, Lower Bavaria



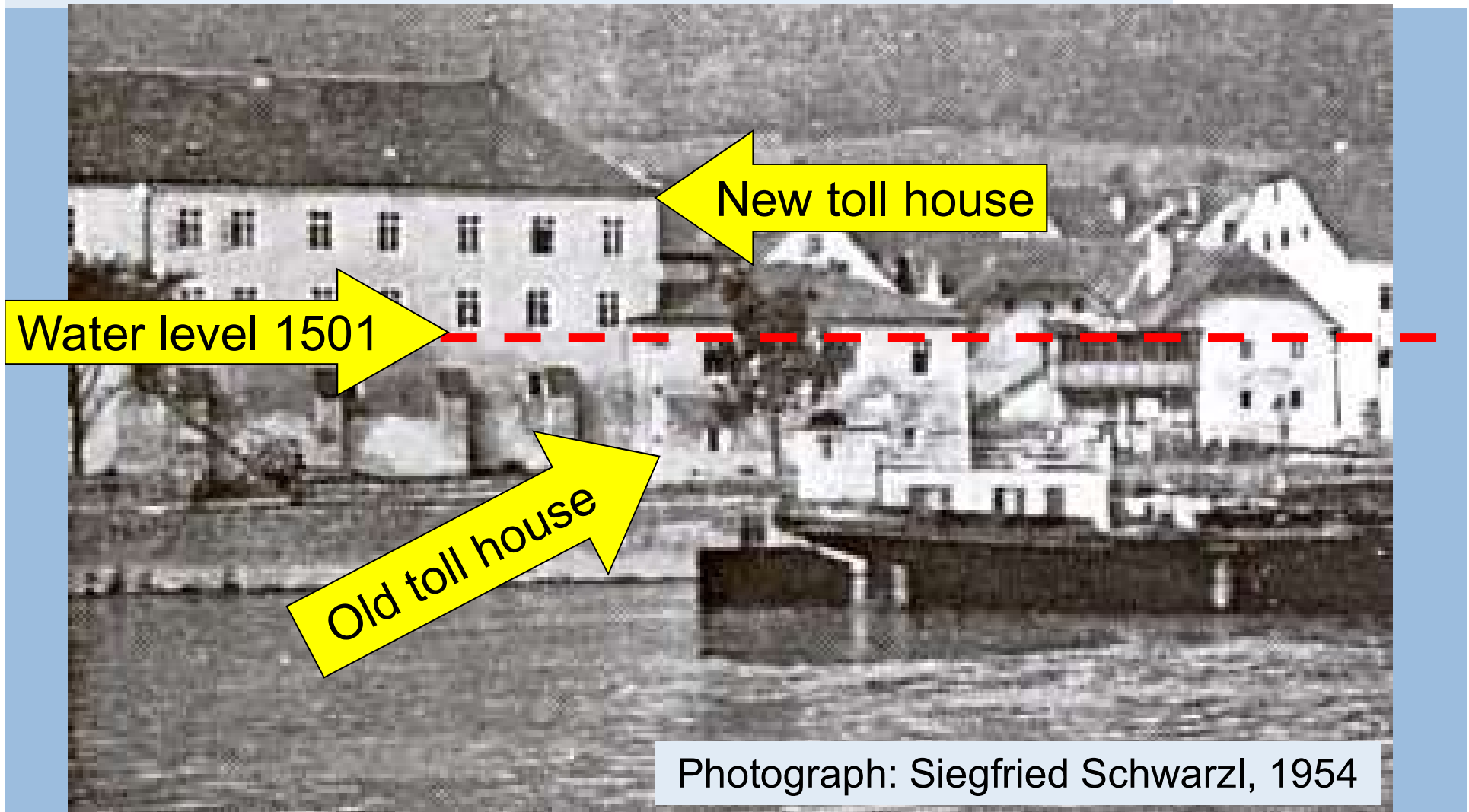
Position of the flood mark in 2006  
(Photograph: Christian Rohr)



... and 1908 (Photograph: Hydro-  
graphie Österreichs 1908: 7)

## Adaptation to the worst case

### The toll houses of Engelhartzell, Upper Austria



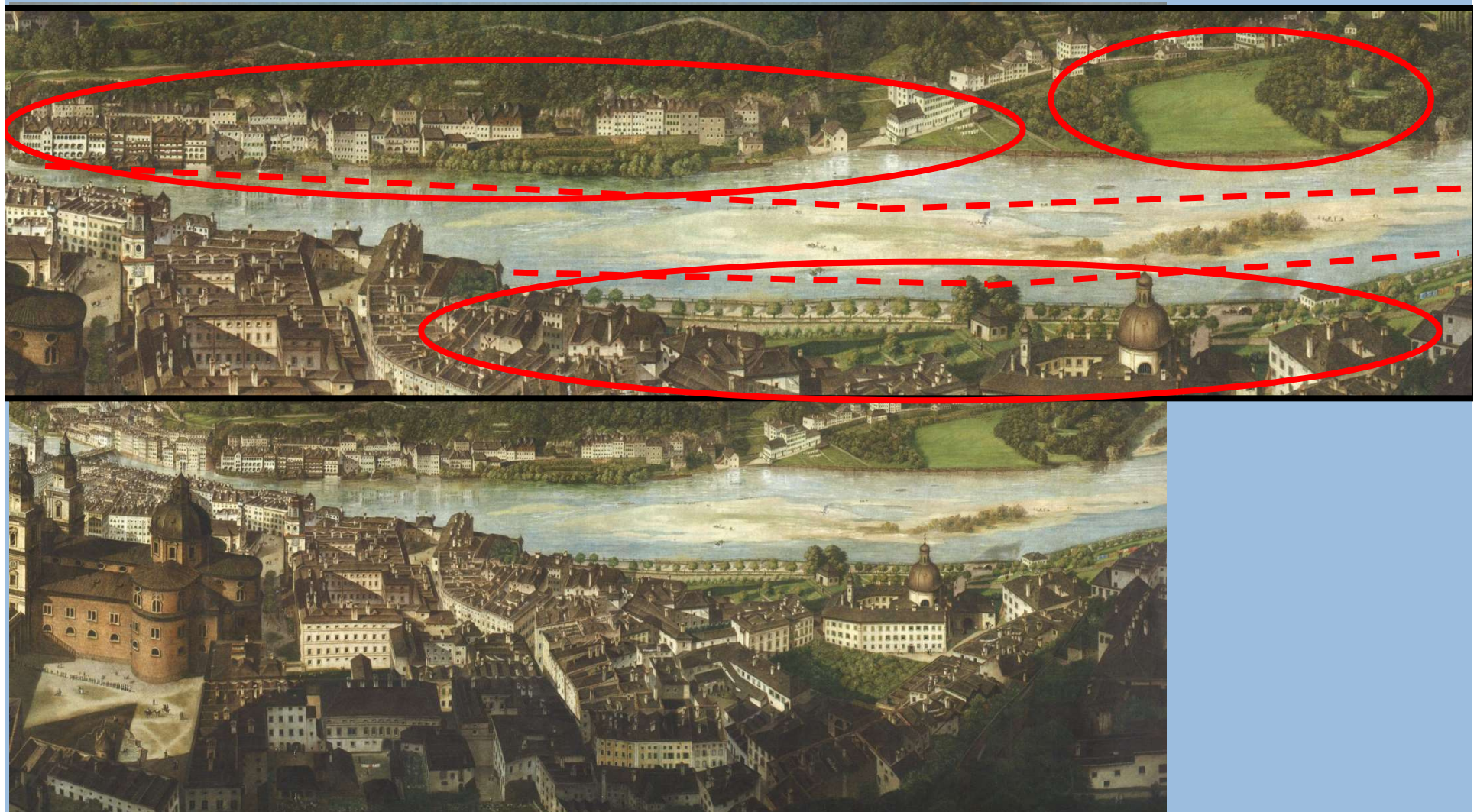
## The increase of flood risk

- Former flood plains become attractive, but endangered and partly not suitable settlement places in the late 19th century
  - Soft soil causes rifts in the houses
  - Ground water problems
  - Flood protection sometimes erected much later than the houses
- Floods
  - Two consecutive and destructive floods in the Bavarian and Austrian catchment area of the Danube river
    - July/August 1897
    - September 1899
  - Floods in France and Switzerland
    - June 1910



# Salzburg in the 19th century

## Sattler panoramic view of Salzburg (1825/1829) (Salzburg: Museum Carolino-Augusteum/Panoramamuseum)





# Salzburg in the 19th century

## Coloured picture postcard (lithograph), around 1900



# Salzburg in the 19th century

## The flood of 1899, photograph by Fotoatelier Würthle (Salzburg: Municipal Archives)





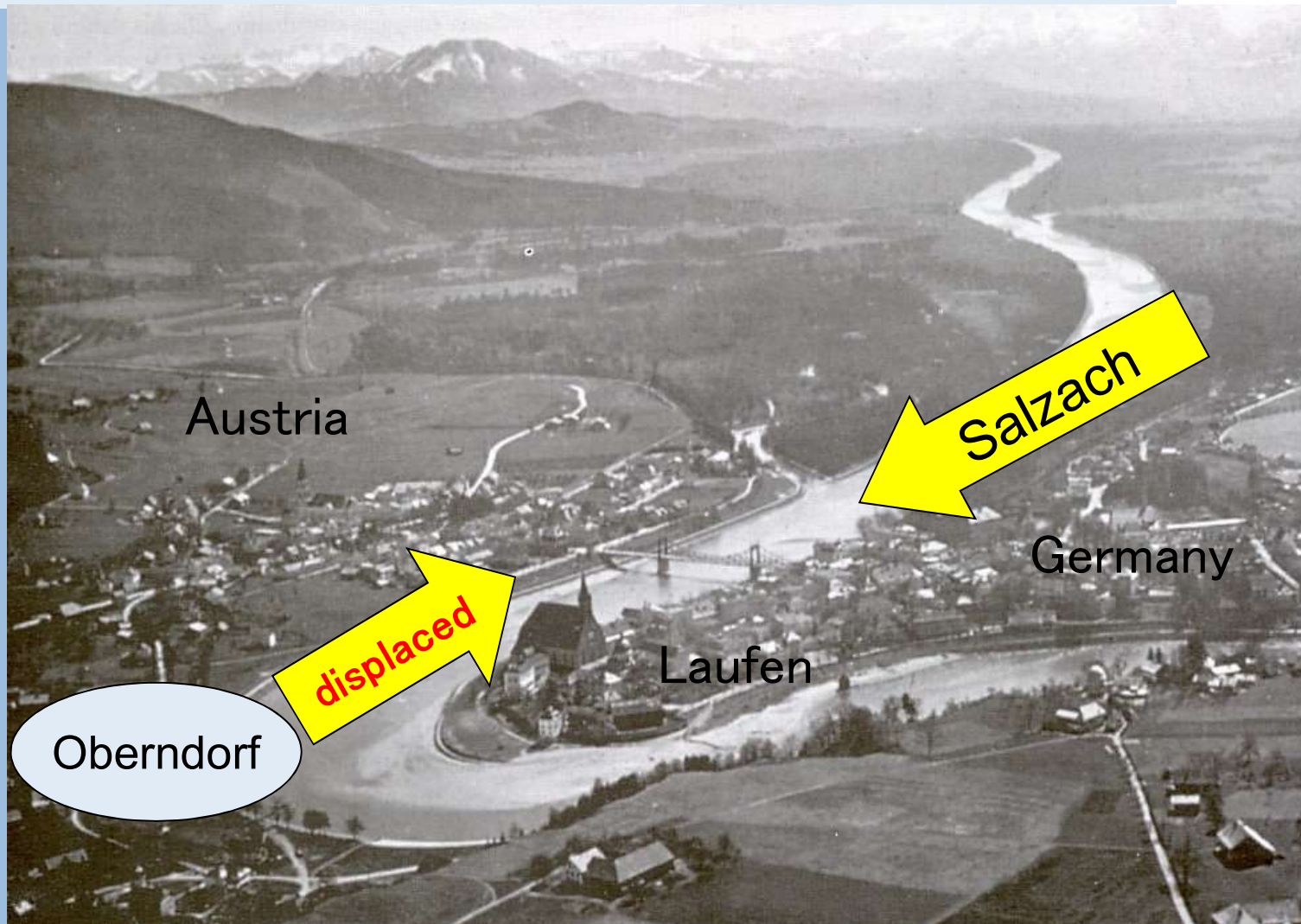
## Banishing the risk of floods

- The so-called *disaster gap* (Christian Pfister)
  - Technical flood protection and straightening of rivers avoids small- and medium-scale floods
  - Relatively few severe large-scale floods in the foothills of the Alps
    - Swiss Plateau: 1910-1987
    - Bavaria, Austria: 1954-2002
- Carelessness concerning suitable settlement places after World War II (in particular in the time of the “economic miracle”)
  - Trend towards single-family houses in historically endangered areas
  - Conversion of use of historical buildings
- Vulnerability raises significantly during “centennial floods” (HQ100 and higher) occurring since the 1980s
  - Integral flood protection measures discussed by experts since the 1970s, but politically enforceable only after the disastrous events



# The flood of 1899

Oberndorf (Salzburg, Austria) and Laufen (Bavaria, Germany)



# The flood of 2013

Oberndorf (Salzburg, Austria) and Laufen (Bavaria, Germany)

Oberndorf,  
02.06.2013,  
Source: Der  
Standard

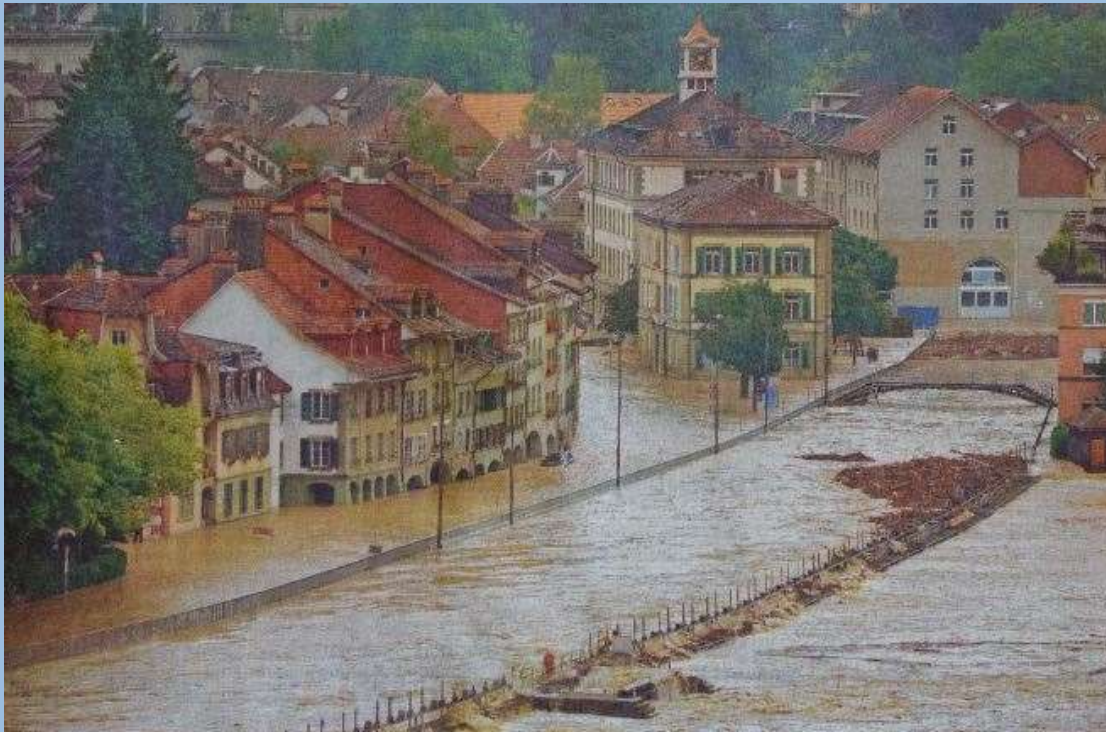


17 June 2021



# The flood of 2005 in Bern

## Evacuations



All photographs (slides 19-20): Der Bund online, August 2005 (today not available any longer)

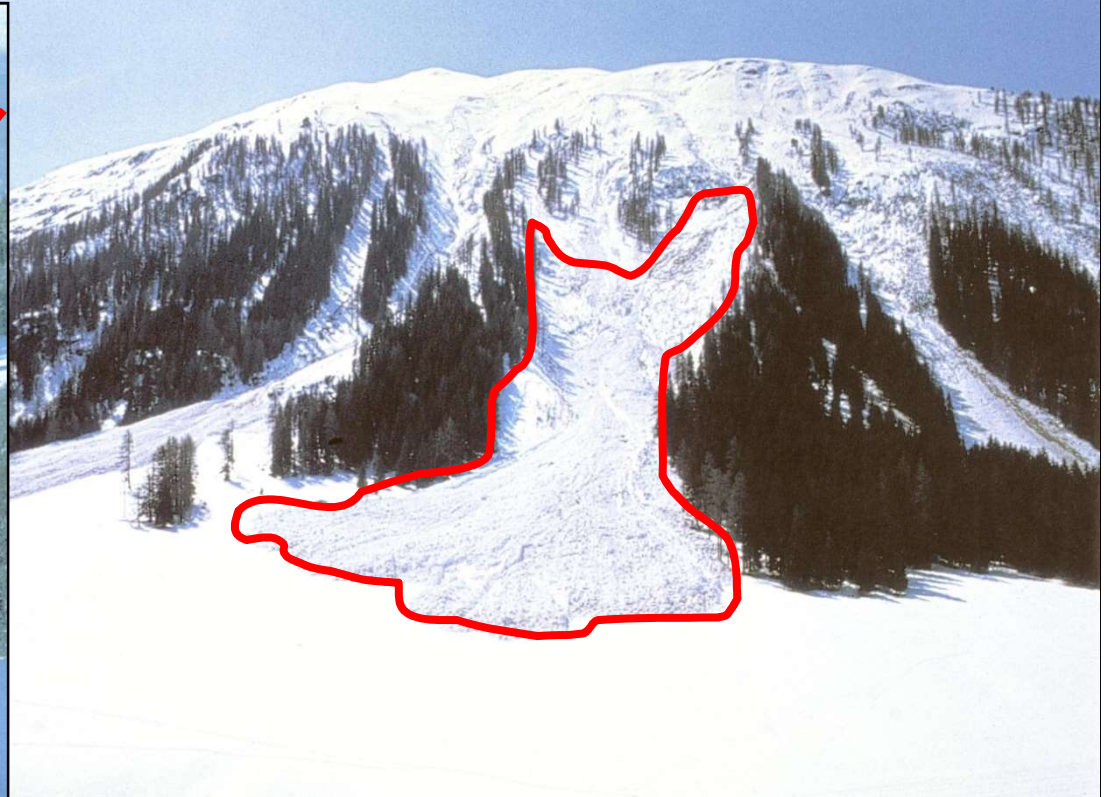
# The flood of 2005 in Bern Damage





# Avalanches

## Basic types



Slab avalanche

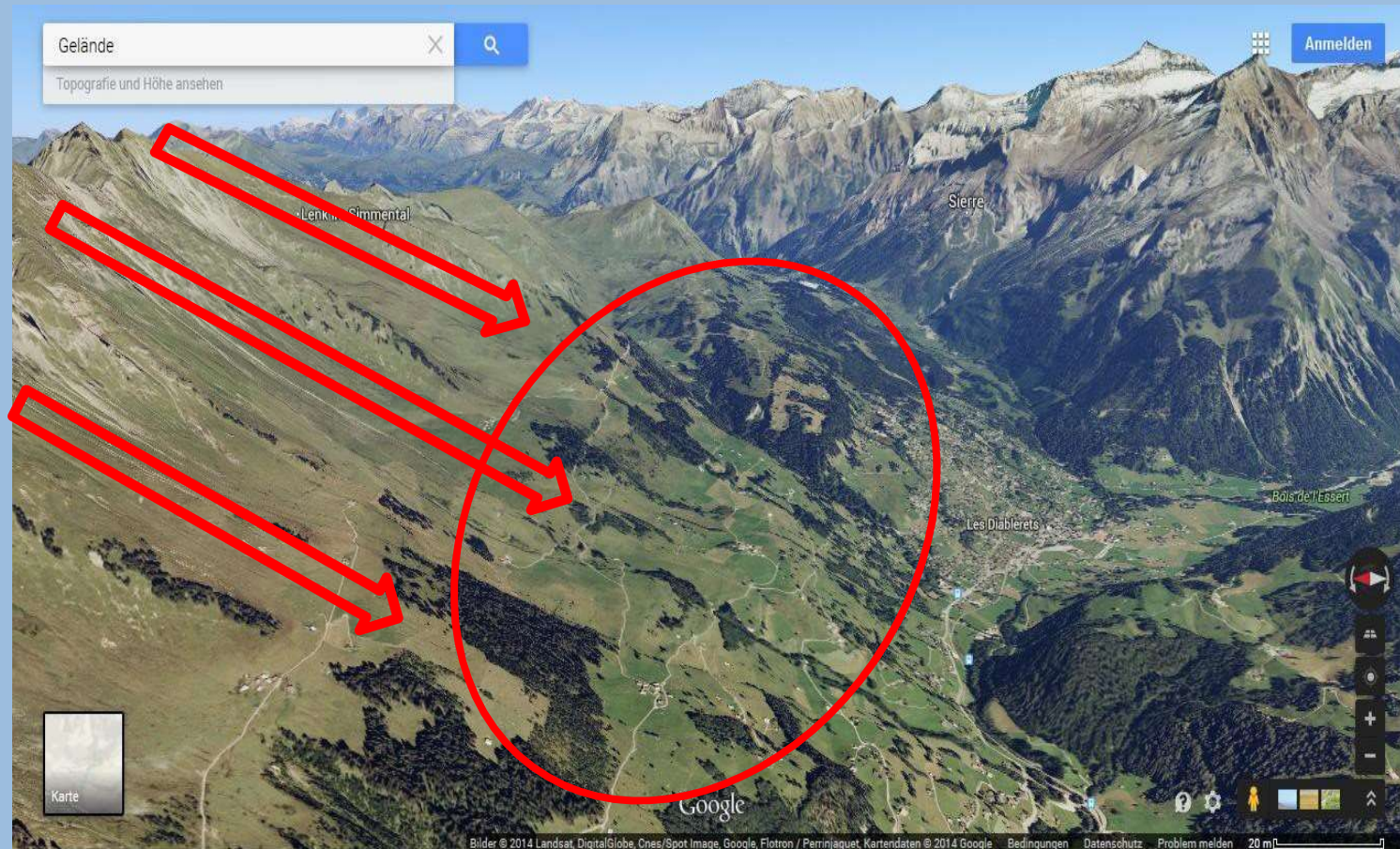
Powder snow avalanche

Photographs: SLF



# Local knowledge of endangered zones

## Vallée des Ormonts (Vaud, Switzerland)

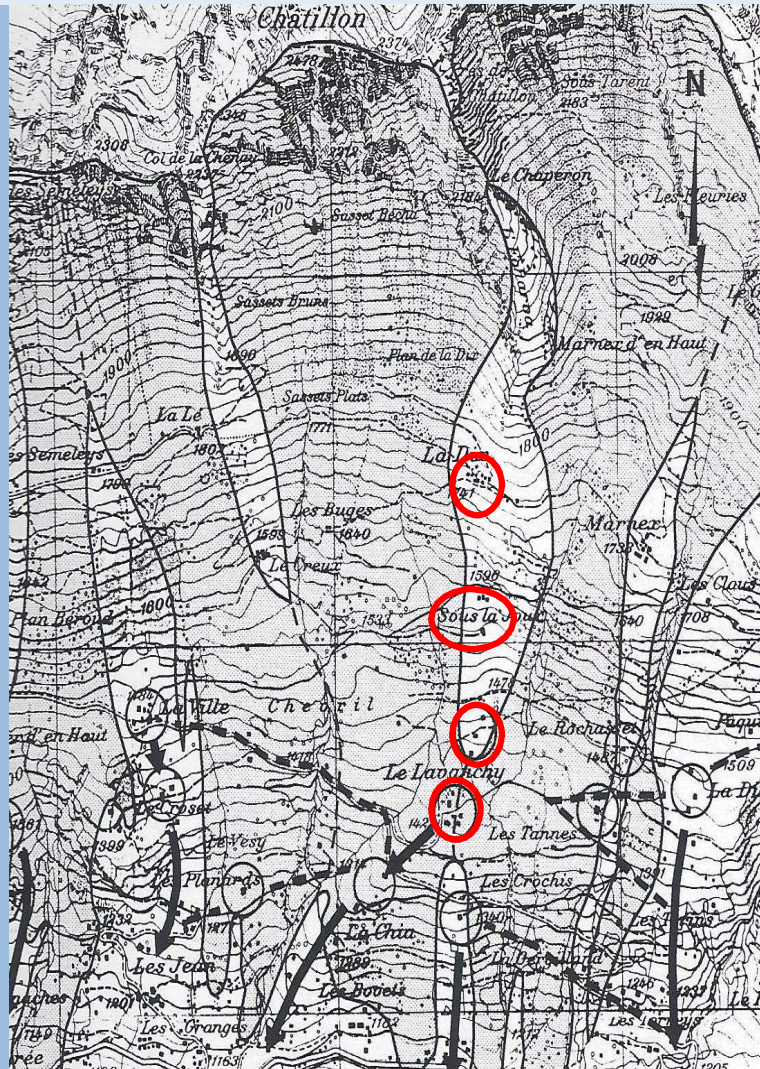


Google Maps, 07.04.2014



# Local knowledge of endangered zones

## Vallée des Ormonts (Vaud, Switzerland)



Source:  
Schoeneich,  
Busset-  
Henchoz:  
2002: 59.

Google Maps,  
07.04.2014



17 June 2021



# Avalanches in the Alps

## Ebenhöch houses in the Cantons Grisons and Valais



Ebenhöch  
houses in St.  
Antönien im  
Prättigau  
(Grisons,  
Switzerland).  
Photograph:  
SLF



# Avalanches in the Alps

## Splitting chocks, protective walls



Davos (Grisons), splitting chock of the Frauenkirche (after 1602). Photograph: Christian Rohr

St. Antönien (Grisons), protective wall against avalanches. Photograph : SLF





# The protective forest of Andermatt

## Documented and protected since 1397

Andermatt  
around 1900,  
coloured  
photograph

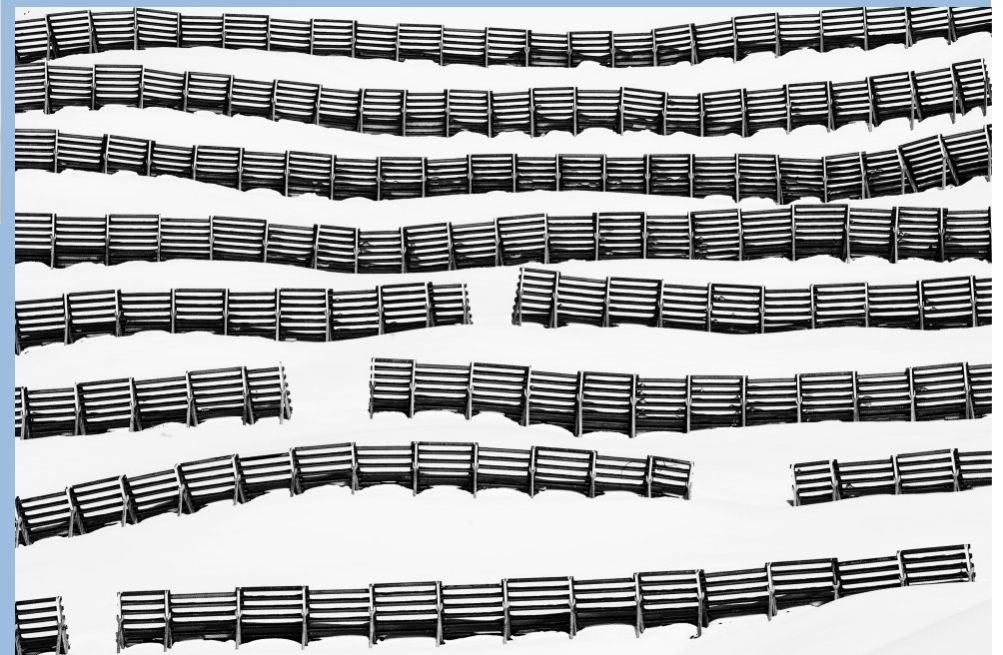


# Structural protective measures

## Avalanche protection in the fracture zone, St. Antönien



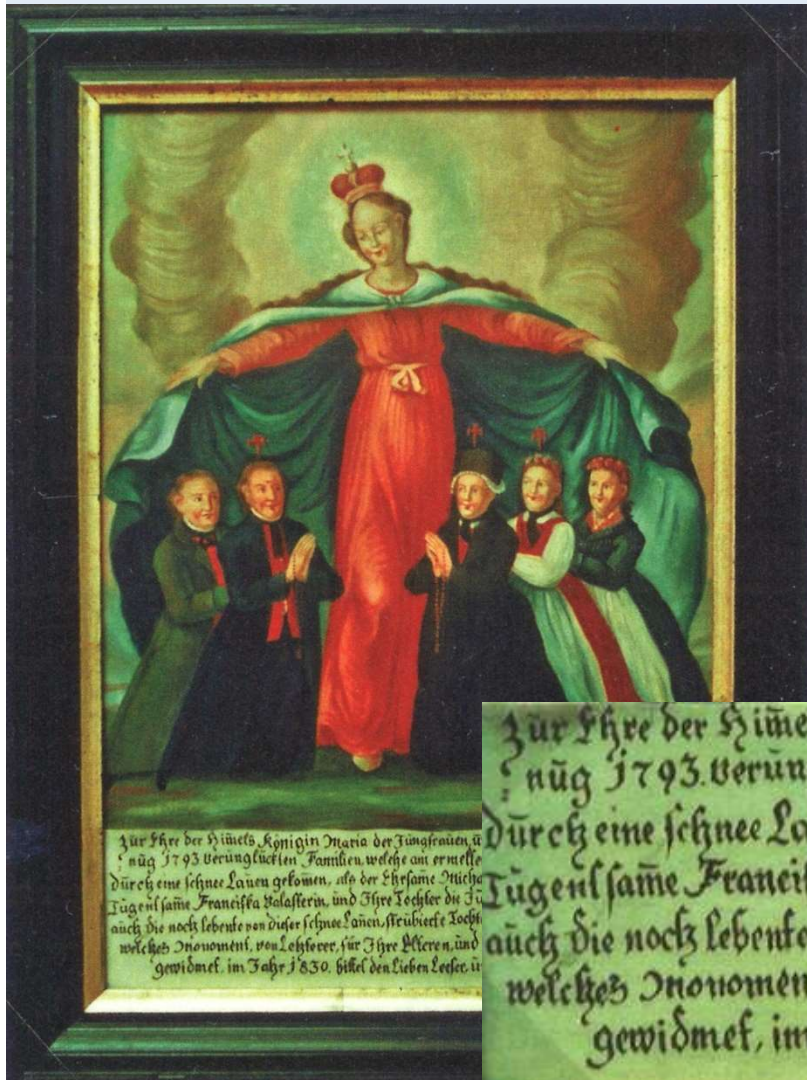
Source: Bern: Alpine Museum of  
Switzerland.  
Photographs: Kaspar Thalman





# Memory cultures

## Ex voto-commemorative tablets



Rütli chapel near St. Gallenkirch, Montafon (Vorarlberg, Austria), 1793/1830.

Zur Ehre der Himels Königin Maria der Jungfrauen, und zum Andencken, die den 34<sup>ten</sup> Nov  
nüg 1793. verunglückten Familien, welche am ermessen daso, Fatzmervol um das Leben  
durch eine schnee Lauen gekommen, als der Ehrsame Michael Strolz, und seine Ehe gattin die  
Tugent same Francisca Walasterin, und Ihre Tochter die Jungfrau Anna Maria Strolzin, wie  
auch die noch lebende von dieser schnee Lauen, strübierte Tochter, Jungfrau, Francisca Strolzin,  
welches Inonument, von Lehreer, für Ihre Elteren, und Schwester seel: zum Andencken  
gewidmet, im Jahr 1830. bittel den Lieben Leser, um ein Vatter unser aue Maria 4.

# Memory cultures

## Sale of picture postcards and photographs

- Picture postcards and photographs sold after disasters to gain money by donations
- Example: Avalanche disaster on 31 January 1907 in the Kleinwalsertal valley (Vorarlberg)
- Text on the back of the photograph:
  - „Menschenfreunde bittet das gefertigte Pfarramt, die Bilder aus der schrecklichen Lawinenkatastrophe (31.1.07) Schaden 200.000 Mark, im Weiler Ahorn Kleinwalsertal, zu 15 Pfg. a Stück zu erwerben. Der Erlös für die 5 geretteten, ihrer Ernährer und ihrer ganzen Habe entblösten Kinder. Das Pfarramt Riezlern.“



Source: Walsermuseum Riezlern

Photograph: Verlag J. Heimhuber; Max Kessler

# The avalanche disaster of Galtür (1999)

## Learning from the catastrophe?

- Memory culture vanishes in the 20th century
  - Inscriptions removed
  - Knowledge about endangered settlement places neglected
- 23-24 February 1999: two disastrous powder snow avalanches in the Paznaun valley (Tyrol)

Source: dpa

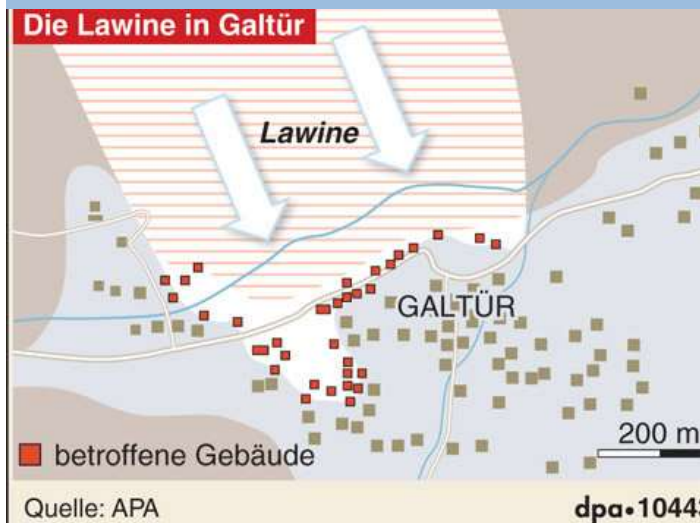




# The avalanche disaster of Galtür (1999)

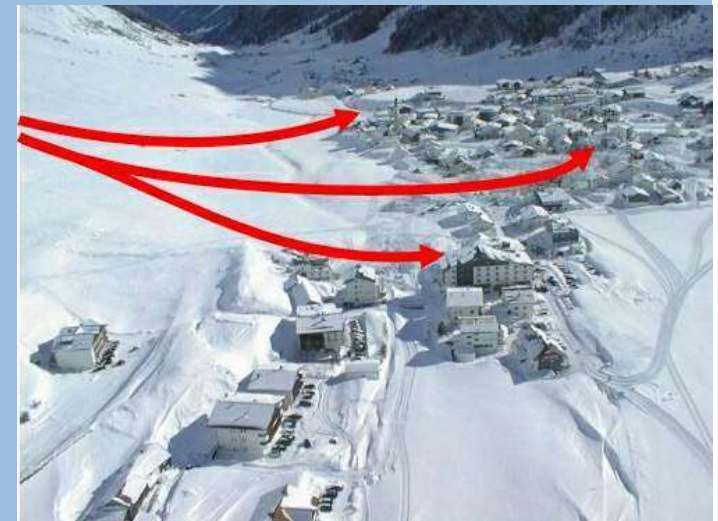
## Learning from the catastrophe?

- Galtür (1584 m above sea level)
  - Several victims after avalanches in early modern times
    - 9 people killed in 1613, 9 in 1622
    - 19 people killed during the 18th century
  - High vulnerability
    - Hardly any forests to protect the village from the North
    - Popular skiing resort
    - Numerous hotels built in the so-called red zone



Source: dpa

Source:  
[www.droessler.at](http://www.droessler.at)



# The avalanche disaster of Galtür (1999)

## Learning from the catastrophe?

- What made Galtür such a disaster?
  - Unpreparedness and carelessness
  - Historical local knowledge neglected
  - High vulnerability: large amount of victims and destroyed houses
  - Help from outside was difficult: road through the Paznaun valley blocked for five days
  - Worldwide media event



Source: dpa



Source: Associated Press



# The avalanche disaster of Galtür (1999)

## Learning from the catastrophe?

- Protective buildings and the emergence of a new culture of disaster memory
  - Protective buildings made of steel on the avalanche endangered slope
  - New protective wall (345 m long, 19 m high) on the bottom of the slope to protect the village
  - *Alpinarium*, a new museum about daily life in high Alpine areas and about the catastrophe of 1999, integrated into the protective wall
- However, still some examples for banished memory: Wikipedia on Andermatt



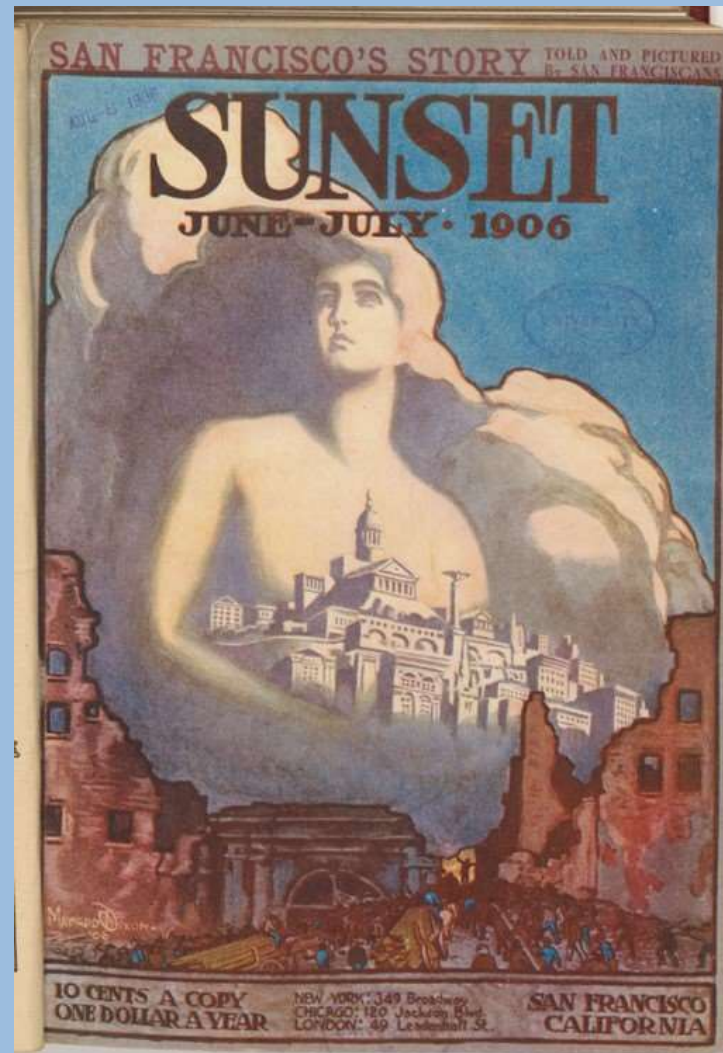
Source: Associated Press

# Cultures of disaster memory and banishment in the USA

- Basic assumption: European colonization of the USA in the 19th century begins parallel to the emergence of “disaster banishment”
  - New settlers often lack long-term local knowledge of natural hazards
  - „Rise up“ mentality: After every disaster, a city emerges larger and more spectacular than before
  - Active preventive measures are mostly inadequate because legal requirements contradict freedom of acting
  - Hardly any forms of active memory culture of extreme natural hazards (monuments, etc.)
- Example: the 1906 San Francisco earthquake and fire
  - *worst case* scenario due to a lack of preparation and numerous adverse breakdowns
  - Reconstruction as “resurrection like a phoenix from the ashes”
  - 1915: Panama-Pacific International Exhibition
  - Up to now hardly any noteworthy memory culture

# The earthquake and fire of San Francisco on 18 April 1906 “Re-erection” of the city

Maynard Dixon: “The New San Francisco”. Cover of the monthly journal *Sunset*, June-July 1906





# The earthquake and fire of San Francisco on 18 April 1906

## Panoramic photograph by George R. Lawrence



Source: Washington,  
Library of Congress,  
ppmsca.07823

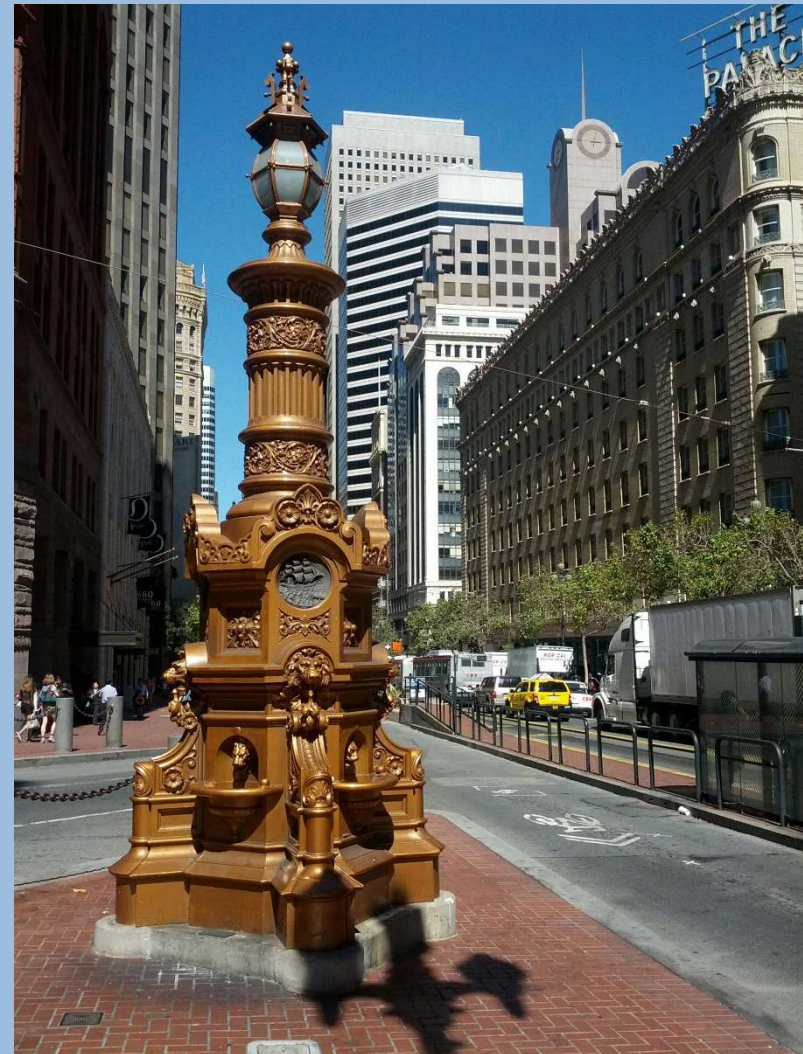




# The earthquake and fire of San Francisco on 18 April 1906

## Hidden traces of a memory culture

San Francisco: Lotta's Fountain.  
Erected in 1875, one of the very few  
monuments withstanding the 1906  
earthquake and fire.  
Place of an annual remembrance of the  
event (18 April, 5:12 a.m.) for the  
surviving people.  
Photograph: J.D.L. Robson



# **The Galveston hurricane 1900**

## **Hidden traces of a memory culture**

Galveston, TX: Memorial remembering  
the Hurricane of 1900, erected in 2000.  
Photograph: G. Allen



# The flood of 1937 of the Ohio river

## Lost traces of a memory culture

Old North Dayton,  
OH: Flood memorial  
park remembering  
the flood of 1937.  
Designed in 1992 by  
Andrew Leicester,  
abolished in 2006.  
Photograph: Andrew  
Leicester



# Hurricane Katrina 2005

- One of the most devastating natural disasters in US history
- 23-30 August 2005
  - Gusts up to 344 km/h
  - Affected areas: Florida, Louisiana, Mississippi, Alabama, Georgia
  - 1836 dead, plus numerous other missing persons
  - Damage estimated at around 100-125 billion USD
  - Inadequate individual prevention measures
- Situation in New Orleans
  - After dike breaches, up to 80 percent of the urban area up to 7.60 meters under water
  - More prosperous classes can mostly flee
  - Poorer population stays in their houses or flees to the Louisiana Superdome
  - Looting



# Hurricane Katrina 2005

## Situation in New Orleans



Source: Wikimedia Commons

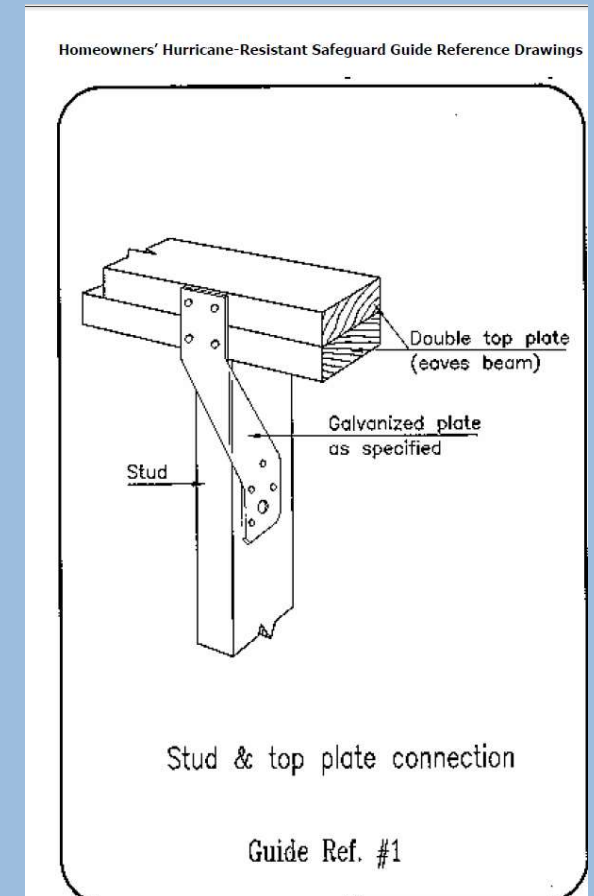
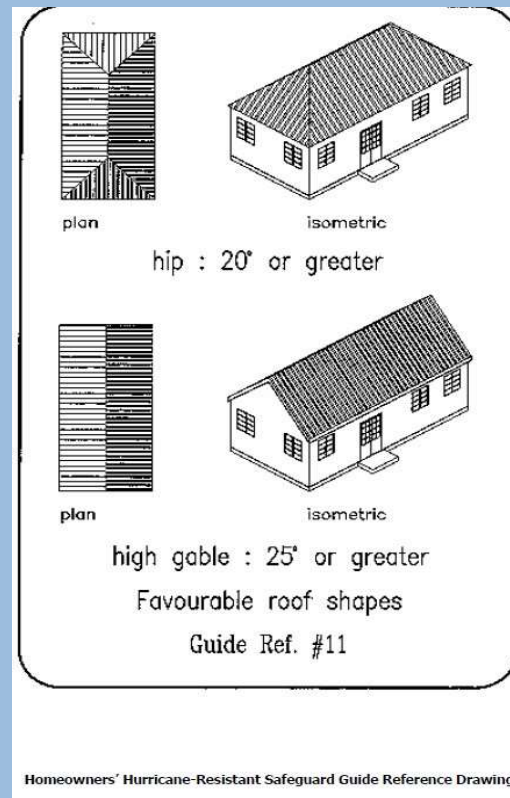
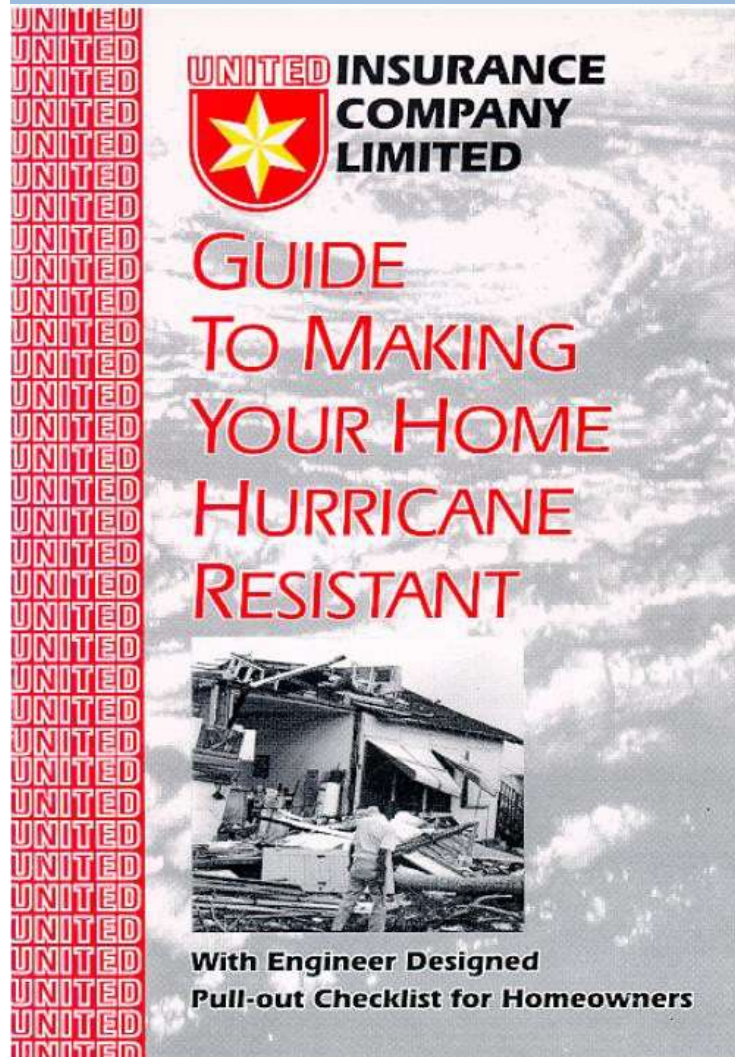
# Hurricane Katrina 2005 and its aftermath

- Guides for Hurricane-proof building exist for most of the affected States
  - Mostly published by insurance companies
- Building Codes in the affected States of the USA
  - Existing, but not executable for private houses
  - Public buildings, hotels, etc. built generally less affected anyway
  - Detailed reglements contradict the American mentality
- Memory cultures?
  - Only very fragmentary in den USA
  - Hardly any museums or commemorative tablets dedicated to natural disasters (contrary to events such as 09/11).
  - Short-term “remembrance” via Youtube, etc.
  - Mentality of “Rise up!” also related to hurricanes
  - First signs for a more conscious memorial culture after 2005



# Hurricane Katrina 2005 and its aftermath

## Building guides for secure roof construction





# Hurricane Katrina 2005 and its aftermath

## New ways of memory culture



New  
Orleans:  
Hurricane  
Katrina  
Memorial.  
Photograph:  
Doug  
MacCash



# Hurricane Katrina 2005 and its aftermath

## New ways of memory culture



New Orleans: Flooded House Museum (left); 17<sup>th</sup> Street Canal Floodwall – commemorative tablet (right). Photographs: Doug MacCash

## Conclusions

- Integration of disaster memory in pre-modern societies
  - Flood marks
  - Religious monuments and rituals of memory
  - Structural adaptation strategies and optimization of the settlement places
- Large-scale protective structures since the late 19th century
  - Protection against minor events increases the carelessness towards major events occurring only once or twice a century
  - Increase of vulnerability (also due to the value of the real estate and its furnishings)
  - Deceptive *disaster gap*
- New forms of memory cultures in the wake of major disasters of the last decades
  - Memorial sites
  - Higher sensitivity due to the awareness of the climate crisis



**Thank you for your attention!**

**Prof. Dr. Christian Rohr  
Institute of History  
University of Bern  
[christian.rohr@hist.unibe.ch](mailto:christian.rohr@hist.unibe.ch)**